IN THE CLAIMS:

Please amend the claims in the above-identified patent application as follows:

1   1. **(Amended)** A method of performing network packet filtering, said

2 method comprising:

3   dividing a set of rules along N dimensions;

4   dividing each of said N dimensions into rule ranges using said set of rules;

5   generating a set of possible rules for each rule range in each of said N dimensions;

6   searching said rule ranges along said N dimensions in parallel to select N sets of

7   possible rules along said N dimensions;

8   logically combining said N sets of possible rules to generate a final set of rules;

9   applying said final set of rules;

10   repeating said steps of searching, logically combining, and applying for each

11   packet to filter;

12   repeating said steps of dividing said set of rules along N dimensions, dividing

13   each of said N dimensions into rule ranges using said set of rules, and

14   generating a set of possible rules for each rule range in each of said N

15   dimensions when a new rule not specifying a new dimension is added to said

16   set of rules; and

17   repeating said steps of dividing each of said N dimensions into rule ranges using

18   said set of rules, and generating a set of possible rules for each rule range in

19   each of said N dimensions when a new rule specifying a new dimension is

20   added to said set of rules .

1   2. **(Amended)** The method as claimed in claim 1 wherein generating a set

2   of possible rules for each rule range in each of said N dimensions comprises generating a

3   rule bit vector for each rule range along each of said N dimensions.

1   3. **(Amended)**   The method as claimed in claim 1 further

2   comprising:

3   generating a search structure for each of said N dimensions to locate a specific

4   rule range.

1   6. **(Amended)** The method as claimed in claim 1 wherein applying said

2   final set of rules comprises selecting a highest priority rule in said final set of rules.

1   7.**(Amended)** The method as claimed in claim 1 wherein applying said

2   final set of rules comprises applying more than one rule in said final set of rules.

1   10. **(Amended)**   The method as claimed in claim 9 wherein applying

2   said final set of rules comprises selecting a highest priority rule in said final set of rules.

Please delete claims 11 to 27. Please add the following claims

1   28. **(Added)**   The method as claimed in claim 19 wherein each rule range

2   comprises a range identifier.

1   29. **(Added)**   The method as claimed in claim 28 wherein said range

2   identifier comprises a rule bit vector that specifies a set of rules that may apply to

3   incoming data units that fall within the associated rule range.

1   30. **(Added)**   The method as claimed in claim 29 wherein said rule bit

2   vectors are logically ANDed together by a rule processor to produce a final bit vector of

3   rules that apply.

1   31. **(Added)**   The method as claimed in claim 28 wherein said range

2   identifier comprises an index value.

1   **32. (Added)**   The method as claimed in claim 31 wherein said index

2   values are used by a rule processor to index into a N dimensional look-up table for a final

3   rule.

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